

Appl. No. : 9/779,691
Filed : February 7, 2001

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (AMENDED) A multilayer circuit board having a multilayer structure ~~of, comprising:~~
a plurality of printed wiring boards including at least a first printed wiring board and a second printed wiring board, wherein each of said first ~~printed wiring board~~ and said second printed wiring boards includes a metal core substrate having a first major surface and a second major surface which are opposite and parallel to each other; ~~and each of which major surfaces is covered with,~~
an electrically insulating layer; at least partially covering each of the major surfaces;
a conductive printed wiring layer formed on the surface of said electrically insulating layer and including a plurality of wiring lines;
a solder resist layer partially covering the surface of said conductive printed wiring layer;
and
local bonding means ~~for mechanically bonding together a pair of the printed wiring boards which are adjacent to each other so as to provide an air gap of a predetermined spacing value between these adjacent printed wiring boards in said multilayer structure,~~
wherein said local bonding means each metal substrate comprises includes a plurality of integral metal projections of a predetermined height, ~~said projections being formed on at least one of said first major surface and/or said second major surface so as to be integral with said metal core substrate and to provide an air gap between the adjacent printed wiring boards in said multilayer structure,~~
wherein said ~~conductive printed wiring layer formed on said electrically insulating layer includes a plurality of wiring lines on said first major surface or said second major surface of said metal core substrate,~~ and
wherein said solder resist layer comprises includes a at least one local opening for exposing metal surface at a region corresponding to at least one of said metal projections selected on the surface of said local bonding means.

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9. (AMENDED) A multilayer circuit board according to claim 1, wherein the second major surface of said first printed wiring board and the first major surface of said second printed wiring board face each other through an air gap in said multilayer structure, and wherein said ~~local bonding means~~ each metal substrate includes a combination of a metal projection formed on one of said second major surface of said first printed wiring board and said first major surface of said second printed wiring board and a local exposed metal portion provided on the other of said second major surface of said first printed wiring board and said first major surface of said second printed wiring board at a position in alignment with said metal projection.

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